

What is claimed is:

1. An optical switch, comprising:
a mirror, an inclination angle of which varies
5 depending on an application voltage;
a driver device applying the application voltage
to the mirror;
an oscillation device generating an additional
signal of a prescribed frequency;
10 a superimposition device superimposing the
additional signal on the application voltage;
a detection device detecting a signal component
of the prescribed frequency from light reflected on the
mirror; and
15 a control device controlling the application
voltage based on the detected signal component.
2. The optical switch according to claim 1, further
comprising:
20 a storage device storing at least one of information
about the application voltage and information about
optical-coupling efficiency of the optical switch; and
a notification device notifying a prescribed
notification addressee of the information stored in the
25 storage device.

5

4

10

a)

15

29

30

20

Va

25

[illegible]

5 component of the first frequency; and

10 5. An optical switch, comprising:

```
15 application voltage;
```

20 application voltage;

25 a first oscillation device generating a first

25 a first oscillation device generating a first

additional signal of a first frequency;

a second oscillation device generating a second additional signal of a second frequency;

a first super imposition device superimposing the
5 first additional signal on the first application voltage;

a second super imposition device superimposing the second additional signal on the second application voltage;

a third driver device applying the third
10 application voltage to the latter mirror;

a fourth driver device applying the fourth application voltage to the latter mirror;

a third super imposition device superimposing the third additional signal on the third application voltage;

a fourth super imposition device superimposing the
15 fourth additional signal on the fourth application voltage;

a detection device detecting respective signal components of the first, second, third and fourth
20 frequencies from light reflected on the latter-stage mirror; and

a first control device controlling the first application voltage based on the detected signal component of the first frequency;

25 a second control device controlling the second

Handwritten notes and markings on the left margin, including a large 'X' and the word 'RECEIVED' written vertically.

application voltage based on the detected signal component of the second frequency;

a third control device controlling the third application voltage based on the detected signal component of the third frequency; and

a fourth control device controlling the fourth application voltage based on the detected signal component of the fourth frequency.

6. A control device for an optical switch with a mirror, an inclination angle of which varies depending on an application voltage, comprising:

a driver device applying the application voltage to the mirror;

an oscillation device generating an additional signal of a prescribed frequency;

a superimposition device superimposing the additional signal on the application voltage;

a detection device detecting a signal component of the prescribed frequency from light reflected on the mirror; and

a control device controlling the application voltage based on the detected signal component.

7. A control device for an optical switch with a mirror,

Sub
SIX
CM
00005027 410701

5 a first driver device applying the first application voltage to the mirror;

a second driver device applying the second application voltage to the mirror;

a first oscillation device generating a first additional signal of a first frequency;

10 a second oscillation device generating a second additional signal of a second frequency;

a first superimposition device superimposing the first additional signal on the first application voltage;

15 a second superimposition device superimposing the second additional signal on the second application voltage;

a detection device detecting respective signal components of the first and second frequencies from light reflected on the mirror;

20 a first control device controlling the first application voltage based on the detected signal component of the first frequency; and

a second control device controlling the second application voltage based on the detected signal

25

component of the second frequency.

8. A control device for an optical switch with both a former-stage mirror, an inclination angle in a first direction of which varies depending on a first application voltage and an inclination angle in a second direction of which varies depending on a second application voltage, and a latter-stage mirror, an inclination angle in a third direction of which varies depending on a third application voltage and an inclination angle in a fourth direction of which varies depending on a fourth application voltage, comprising:
- a first driver device applying the first application voltage to the former-stage mirror;
 - a second driver device applying the second application voltage to the former-stage mirror;
 - a first oscillation device generating a first additional signal of a first frequency;
 - a second oscillation device generating a second additional signal of a second frequency;
 - a first superimposition device superimposing the first additional signal on the first application voltage;
 - a second superimposition device superimposing the second additional signal on the second application voltage;

a fourth driver device applying the fourth application voltage to the latter-stage mirror;

a fourth oscillation device generating a fourth additional signal of a fourth frequency;

a fourth superimposition device superimposing the fourth additional signal on the fourth application voltage;

a first control device controlling the first application voltage based on the detected signal component of the first frequency;

a second control device controlling the second application voltage based on the detected signal component of the second frequency;

a third control device controlling the third
25 application voltage based on the detected signal

Sub
Box
C-
0098607
" 40704

Sub
A1
end

069870 10-10-68

10

15

control means for controlling the application voltage based on the detected signal component.

20